Masculine vs Feminine Personality Traits and Women's Employment Outcomes in Britain: A Field Experiment

Drydakis Nick[1], Sidiropolou Katerina[1], Patnaik Swetketu[1], Selmanovic Sandra[1], and Bozani Vasiliki[2]

Abstract

In the current study, we utilized a correspondent test to capture the way in which firms respond to women who exhibit masculine and feminine personality traits. In doing so, we minimized the potential for reverse causality bias and unobserved heterogeneities to occur. Women who exhibit masculine personality traits have a 4.3 percentage points greater likelihood of gaining access to occupations than those displaying feminine personality traits. In both male- and female-dominated occupations, women with masculine personality traits have an occupational access advantage, as compared to those exhibiting feminine personality traits. Moreover, women with masculine personality traits take up positions which offer 10 percentage points higher wages, in comparison with those displaying feminine personality traits. Furthermore, wage premiums are higher for those exhibiting masculine personality traits in male-dominated occupations, than for female-dominated positions. To the best of our knowledge, this is the first field experiment to examine the effect of masculine and feminine personality traits on entry-level pay scales. As feminine personality traits are stereotypically attributed to women, and these characteristics appear to yield fewer rewards within the market, they may offer one of many plausible explanations as to why women experience higher unemployment rates, whilst also receiving lower earnings, as compared to men.

Keywords: Masculine traits, Feminine traits, Occupational Access, Wages, Field experiment
JEL classifications: J16; J31

[1]Centre for Pluralist Economics, Anglia Ruskin University, East Road, LAIBS, Cambridge, CB1 1PT, United Kingdom. Corresponding author: nick.drydakis@anglia.ac.uk.

[2]Economics Research Centre, University of Cyprus, Nicosia, CY-1678, Cyprus.

1. Introduction

By applying a field experiment design, within a Britain-based setting, we examine whether masculine personality traits in women generate better job market prospects, as compared to feminine personality traits. Although dozens of scholarly papers have explored the relationship between gender (i.e., male and female) and labour market outcomes (e.g., Weichselbaumer and Winter-Ebmer, 2005), the importance of individual masculine and feminine personality traits as casual determinants of labour market outcomes has, unfortunately, been the subject of little empirical investigation (Weichselbaumer, 2004).

Some studies have emphasized the role of personality traits in individual job market success (e.g., Osborne Groves, 2005; Heckman, et al., 2006; Mueller and Plug, 2006; Waddel, 2006; Borghans et al., 2008; Almlund et al., 2011). For instance, when utilizing the Big Five Sex-Role Inventory (Bem, 1981), studies have identified a negative association between aggression, external locus of control and wages (Osborne Groves, 2005), and a positive association between emotional stability, conscientiousness, non-agreeableness, openness to experience and wages (Nyhus and Pons, 2005; Mueller and Plug, 2006; Almlund et al., 2011). In general, personality traits are perceived as productivity-related attributes. They have the capacity to influence wages and/or preferences, which can, in turn, affect education and occupational sorting and/or manifest as characteristics which result in positive or negative workplace biases displayed by colleagues, employers and customers (Heckman et al., 2006; Mueller and Plug, 2006).

Studies have suggested that two important characteristics, namely individual masculine and feminine personality traits, are associated with job market prospects (Acker, 1990; Weichselbaumer, 2004; Franzway et al., 2009; Heilman, 2012). Masculinity, which refers to traits which are stereotypically attributed to men, is typified by the image of a strong, technically competent, ambitious, self-sufficient and authoritative leader who can maintain

control of his emotions (Connell 1987; Hoftede, 2001). Conversely, femininity, comprising traits which are stereotypically attributed to women, is associated with empathy, sensitivity, loyalty, and a caring disposition (Kolb, 1999; Heilman, 2012).

Commonly held assumptions are that not only do men and women differ, but they also tend to act like polar opposites, with women appearing to lack the qualities which are most prevalent in men, and vice versa (Heilman, 2012). For example, dominance is an acceptable trait in men, but is less socially acceptable in women; in contrast, women are permitted to display weakness, whereas this trait is viewed as unacceptable in men (Rudman et al., 2008). These characterizations are consistent across various cultures, time spans and diverse employment settings (Auster and Ohm, 2000; Schein, 2001; Ozkan and Lajunen, 2005; Rudman et al., 2008; Heilman, 2012; Xiumei et al., 2012). Laboratory studies have shown that women award themselves lower wages, are less likely to demand equivalent wages and are more satisfied to receive lower earnings than their male counterparts (Honeyman and Goodman, 1991; Wajcman, 2000; Williams et al., 2010).

It is important to note, however, that individual men and women are not passively shaped by gender-typical behaviour, as they also have the capacity to develop atypical gender behavioural traits (Forseth, 2005). Men and women are not born with masculinity and femininity as part of their genetic make-up; rather, it is a concept into which they are acculturated (Berger et al., 1995). Furthermore, what is regarded as gender-appropriate can alter over time, and gender assumptions are invariably interpolated by cultural, historical and geographical location-related factors (Cornwall and Lindisfarne, 1994). The combined effect of gender equality, feminism and the gay movement has challenged traditional concepts formed of feminine women and masculine men (Wayne and Cordeiro, 2003; Messerschmidt, 2004).

In considering these patterns, we suggest that some women might develop and adopt masculine personality traits, and maximize their use based on gender-atypical behaviours. By utilizing a correspondent test (Drydakis, 2015), in the current study, we can directly capture the way in which firms respond to individuals who exhibit masculine and feminine personality traits. In reality, masculine and feminine personality traits may be a probable outcome of wage-related differentials. Top-ranking positions (with correspondingly higher wages), specific roles and responsibilities and qualities regarded as ideal employee characteristics may require a more masculine-oriented personality. Our experimental approach could isolate reverse causality bias, as well as offer clear evaluations of the effect of masculine and feminine personality traits on occupational access and wage distribution.

The remainder of the paper is organized as follows: the study's hypothesis is proposed in the next section; Section 3 describes the experiment; and Section 4 presents the results, followed by a discussion and the conclusions we have drawn.

2. Theoretical framework

Stereotypically male qualities comprise the traits which characterize successful employees, while, conversely, femininity is not closely aligned with workplace success (Prentice and Carranza, 2002; Franzway et al., 2009). Masculine personality traits are perceived to be important human capital characteristics, which signal essential employee productivity assets (Budig, 2002; Franzway et al., 2009). Laboratory studies have suggested that positive associations exist between men, masculinity and wealth (Williams et al., 2010). Leadership capability is signalled through masculinity, which, in turn, is accompanied by workplace rewards (Franzway et al., 2009; Williams et al., 2010). Several meta-analyses have consistently identified and discussed the role played by masculinity as a primary predictor of workplace progression (e.g., Lefkowitz and Zeldow, 2006).

Women who minimize their feminine associations and engage in compensatory gendered practices can assume dominant positions, as their masculine traits become an important production asset (Budig, 2002; Forseth, 2005; Hewlett and Luce, 2005; Koenig et al., 2011). Professional skills may not always be an effective means by which women can convey authority and competency, while masculine personality traits can also serve as an external signalling function within the workplace (Rudman and Phelan, 2008; O'Neill and O'Reilly, 2010). Numerous studies have shown that the attitudes held by women who excel in their careers include high self-efficacy, a strong desire to succeed and provide leadership and the general adoption of career, as opposed to family identity (Eagly and Steffen, 1984; Eagly et al., 2000; Hewlett and Luce, 2005; Koenig et al., 2011). Women are becoming more similar to men in terms of their career aspirations and achievements. They are also more inclined to view themselves as possessing qualities associated with strong leadership (Dennis and Kunkel, 2004; Eagly, 2005; Wong, 2005; Koenig et al., 2011; Vongas and Al Hajj, 2015).

Feminine personality traits in women may encompass characteristics which reduce opportunities for entering an occupation, career advancement and wage increases (Dennis and Kunkel, 2004; Koenig et al., 2011). Consistent with existing theoretical and empirical evaluations, we have put forward the following hypothesis regarding masculinity, femininity and outcomes for women within the labour market:

Hypothesis: Masculine personality traits generate better labour market outcomes for women, as compared to feminine personality traits.

The study's hypothesis is based on the assumptions that in the labour market masculine personality traits may increase competency levels, while, conversely, feminine personality traits may jeopardize authority and leadership opportunities (Williams and Best, 1990; Levin, 2001; Schein, 2001; Wong, 2005; Franzway et al., 2009). The psychological and sociological studies referred to in this section focus on several different occupational groups,

such as engineering, the police force, the construction industry, trade, business and banking, social care and education. Ultimately, they have all reached the same conclusion, regardless of employee gender and occupation, as well as the gender composition within specific occupational groups: masculine personality traits are associated with workplace success (Levin, 2001; Budig, 2002; Forseth, 2005; Hewlett and Luce, 2005).

3. Design of the experiment

Over a seven-month period, between January–July, 2017, we submitted written job applications comprising carefully matched pairs, in response to vacancies advertised in Britain's capital city of London. The objective was to assess differences in treatment due to masculine or feminine personality traits, at the initial stages of an application selection process (Drydakis, 2015). The fictitious applications were similar in all other relevant respects, but one. Therefore, the personality traits depicted of these women were the only characteristic that differed between the two applications (Weichselbaumer, 2004; Drydakis, 2015). Both applications were submitted to the same firm, and the degree of personality trait bias was measured by calculating the difference in the number of invitations for interview that members of each group received. Moreover, other relevant information was recorded, for example, if a recruitment advertisement clearly stated the remuneration associated with the post, thus allowing us to evaluate whether masculine or feminine personality traits would affect the wage being offered (Drydakis, 2015).

The applications submitted matched the profile of unmarried, white, British females, who were 21 years of age and currently in their third year of a Bachelor of Science degree programme. The students were studying psychology, business studies or education (primary level). All students were expecting to achieve an upper second class honours qualification (i.e., 2:1). In all cases, we matched addresses on the basis of postal codes to indicate the same

social class status. We applied for entry-level jobs, consistent with their fields of study. The positions were based in a wide range of work environment settings, such as roles in businesses which typically represent male-dominated occupations, as well as positions in education and social services, which are generally regarded as female-dominated occupations (Office for National Statistics, 2013).

In half of the paired applications submitted, women were self-characterized as portraying leadership traits, a competitive mindset and willingness to take risks; this comprised the so-called 'women with masculine personality traits' cohort (Bem, 1981). In the other half of the paired applications, women were self-characterized as being gentle, friendly and affectionate; reflecting the so-called 'women with feminine personality characteristics' group (Bem, 1981). Scientists have used the Bem Sex Role Inventory (Bem, 1981) to provide a measure of gender-role stereotyping (Archer and Lloyd, 2002; Ozkan and Lajunen, 2005; Calvo-Salguero et al., 2008). In the latter inventory, gender stereotypes refer to the beliefs people hold in relation to members categorized as 'man' or 'woman' (Archer and Lloyd, 2002). The stereotypical descriptions of men and women have emerged from repeated observations of genders engaging in different social roles[1] (Ozkan and Lajunen, 2005; Calvo-

[1] Based on Bem's (1981) theoretical predictions, traits are classified as masculine if they are appraised, from a societal perspective, as more suitable for men than women. Conversely, feminine traits are those deemed to be more appropriate for women than men. Bem's (1981) theory is built on the assumption that masculinity and femininity operate on separate continuums, allowing individuals to embody both characteristics. Recent attempts to validate the content of the Bem Sex Role Inventory masculinity and femininity scales provide evidence for the persistence of these stereotypes throughout different countries (Holt and Ellis, 1998; Auster and Ohm, 2000; Ozkan and Lajunen, 2005; Xiumei et al., 2012).

Salguero et al., 2008). Indeed, a recent United Kingdom-based study has shown that gender typecasting continues to prevail, thus affecting gender evaluations (WorldPay Zinc, 2013). People are prone to stereotyping men and women based on their gender. Men view women as more caring, compassionate and empathetic (WorldPay Zinc, 2013). Men, however, are regarded by women as the stronger sex (WorldPay Zinc, 2013). In addition, gender-stereotypical hobbies were included in the applications submitted for the purposes of this study. Women with masculine personality traits were portrayed as having an interest in hiking and chess. In contrast, women with feminine personality traits were depicted as interested in flower arranging and jewelry-making.

The format of each application differed for every pair submitted, whereby distinctive application styles were used and distributed evenly among the two applications. Finally, for any one position, one half of the enquiries comprised women with masculine personality traits, while the other half reflected women characterized by feminine personality traits.

4. Results

4.1 Descriptive statistics

The aggregate raw statistics relating to invitations for interview (or filling vacancies) are presented in Table 1. As illustrated in the final line of this table, the net difference in favour of women with masculine personality traits is 25.1 percent. This difference is statistically significant at a 1% level. In addition, women with masculine personality traits experience a 28.2 percent greater likelihood of receiving an invitation for interview to a position in the social services field ($p<0.05$), following by 24.6 percent in the business sector ($p<0.01$) and, finally, 22.8 percent in education ($p<0.10$). These patterns suggest that in both male- and female-dominated occupations, women with masculine personality traits have an occupational access advantage, as compared to those displaying feminine personality traits.

However, the relevant difference between male- and female-dominated occupational groups is statistically insignificant (x^2=0.29, p>0.10).

[Table 1]

Table 2 presents the entry-level annual wages for those who received invitations for interview. As illustrated in the final line of this table, women with masculine personality traits were shortlisted for more highly paid positions, as compared to those exhibiting feminine personality traits; i.e., £27,260.8 versus £26,148 British pounds sterling, per annum. This difference is statistically significant at a 5% level. Analysis was undertaken of wage differences for each occupational group, based on masculine and feminine personality traits. The results revealed that wage differentials were highest within the business sector (4.87 percent, p<0.05), as compared to the educational (4.30 percent, p<0.10) and social services fields (3.6 percent, p>0.10). It appears that wage premiums were higher for those exhibiting masculine personality traits in male-dominated occupations, than for female-dominated positions.

[Table 2]

4.2 Estimations

In Table 3, Model I, we present the estimates regarding invitations to interview, having controlled for occupational heterogeneity. In all cases, we employed probit models and have reported marginal effects. It is observed that women with masculine personality traits had a 4.3 percentage points greater likelihood of receiving an invitation for interview than women with feminine personality traits. The estimate is statistically significant at a 1% level.

In Model II, we present the results of the logged net annual wages offered where applicants received invitations to interview. We have controlled for occupational heterogeneity. It is observed that women with masculine personality traits were invited for

interview for vacancies which offered 10 percentage points higher wages, as compared to women with feminine personality traits. The estimate is statistically significant at a 1% level.

Based on these estimations, the study's hypothesis is accepted; thus, masculine personality traits in women generate better occupational access and higher entry-level wages, as compared to feminine personality traits.

[Table 3]

5. Discussion and conclusions

In this study, we sought to empirically evaluate whether women's masculinity and femininity traits could exert either a positive or negative influence on access to specific occupations, as well as determining entry-level pay scales. By conducting a correspondent test and utilizing the Bem Sex Role Inventory framework (Bem, 1981), we hypothesized and empirically verified that masculine personality traits generate better labour market prospects, as compared to feminine personality traits. Women who conform to feminine personality traits experience reduced occupational access, and are assigned to correspondingly lower paid positions, while those who exhibit masculine personality traits can gain better occupational access, and receive potentially higher remuneration rates. Given the setting for this specific experiment, it appears that women exhibiting feminine personality traits may deviate from this behaviour toward a more desirable masculine role, which employees are expected to perform in order to achieve economic success within the workplace. The occupational access patterns are robust in both male- (business) and female-dominated (education and social services) occupations. In addition, it appears that wage premiums are higher for those exhibiting masculine personality traits in male-dominated occupations, than female-dominated positions. One might argue that in male-dominated jobs, masculine traits are deemed to be more appropriate, and, therefore, are more favourably rewarded.

The findings to emerge from our experiment are in line with those studies suggesting that masculine personality traits (especially assertiveness, dominance, aggressiveness and leadership) reap greater rewards in terms of remuneration, while their absence impacts negatively upon employment progression (Schein, 2001; Budig, 2002; Bruni et al., 2004; Weichselbaumer, 2004; Forseth, 2005; Wong, 2005; Koenig et al., 2011). Moreover, deviation from feminine personality traits typically associated with women was found to be correlated with better employment prospects. This result adds to the growing body of literature in the social science arena, regarding the relationship between unobserved traits and employee labour market outcomes (Myeller and Plug, 2006; Almlund et al., 2011; Drydakis, 2014; Drydakis, 2015; Drydakis, 2017).

Based on these trends, we may have gained vital insights into the widely-known inferior status women hold within the job market (Weichselbaumer, 2004). As feminine personality traits are stereotypically attributed to women, and these characteristics appear to be less favourably rewarded in the market, they may offer one of many plausible explanations as to why women experience higher unemployment rates, whilst also receiving lower earnings, as compared to men (Drydakis, 2017). The market currently rewards the specific traits stereotypically attributed to men. Therefore, employees exhibiting feminine personality traits may experience discriminatory workplace practices. Women can be disadvantaged in relation to how they are appraised, not simply on the basis of their achievements, or on their productivity levels, but rather on the gender group to which they are aligned (Heilman, 2012). While diversity and equal opportunities are continuously being advocated within workplace settings, nevertheless, masculine personality traits appear to remain prevalent, thus challenging the rhetoric surrounding gender equality.

It is important to note that although our field experiment minimized unobserved heterogeneities and reverse causality bias, we have to highlight that the current findings are

solely applicable to the applicants' profile, accentuated masculine and feminine personality traits, choice of occupation and the specific time frame, country and region in which the experiment took place. Consequently, the analysis presented and the results reported are merely an indication of the relationship between masculine and feminine personality traits and labour market outcomes. Any attempt to examine variations in masculine and feminine personality traits, human capital and additional occupational groups, as well as regional and national diversity, would require a further extension of the scope of this study.

References

Acker, J. (1990). Hierarchies, Jobs, Bodies: A Theory of Gendered Organizations. *Gender and Society*, Vol. 4, No. 2, pp. 139-158.

Archer, J. and Lloyd, B. (2002). *Sex and Gender*. Cambridge: Cambridge University Press.

Almlund, M. Duckworth, A. L. Heckman, J. J. and Kautz, T. (2011). Personality Psychology and Economics. In E. A. Hanushek, S. Machin, and L. Wobmann, (Eds.), *Handbook of the Economics of Education* (pp. 1-181). Amsterdam: Elsevier.

Auster, C. J. Ohm, S. C. (2000). Masculinity and Femininity in Contemporary American Society: A Reevaluation Using the BEM Sex-Role Inventory. *Sex Roles*, Vol. 43, No 7, pp. 499-528.

Bem, S. L. (1981). *Bem Sex Role Inventory: Professional Manual*. CA: Consulting Psychologists Press.

Berger, M. Wallis, B. and Watson, S. (1995). *Constructing masculinity*. London: Routledge.

Blau, F. D., and Kahn, J. (2007). The Gender Pay Gap. *The Economists' Voice,* Vol. 4, No. 4, pp. 1–6.

Borghans, L. Duckworth, A. L. Heckman, J. J. and Wel, B. (2008). The Economics and Psychology of Personality Traits. *Journal of Human Resources*, Vol. 43, No. 4, pp. 972-1059.

Bruni, A. Gherardi, S. and Poggio, B. (2004). Doing Gender, Doing Entrepreneurship: An Ethnographic Account of Intertwined Practices. *Gender, Work and Organization*, Vol. 11, No. 4, pp. 407-429.

Budig, M. J. (2002). Male Advantage and the Gender Composition of Jobs: Who Rides the Glass Escalator? *Social Problems*, Vol. 49, No. 2, pp. 258-277.

Calvo-Salguero, A. García-Martínez, A. M. Á. and Monteoliva, A. (2008). Differences Between and Within Genders in Gender Role Orientation According to Age and Level of Education. *Sex Roles*, Vol. 58, No. 7-8, 535–548.

Connell, R. W. (1987). *Gender and Power: Society, the Person and Sexual Politics*. Cambridge: Polity Press.

Cornwall, A. and Lindisfarne, N. (1994). *Dislocating Masculinity: Comparative Ethnographies*. London: Routledge.

Dennis, M. R. and Kunkel, A. D. (2004). Perceptions of Men, Women, and CEOs: The Effects of Gender Identity, *Social Behavior and Personality*, Vol. 32, No. 2, pp. 166-168.

Drydakis, N. (2015). Sexual Orientation Discrimination in the United Kingdom's Labour Market: A Field Experiment, *Human Relations*, Vol. 68, No. 11, pp 1769–1796.

Drydakis, N. (2014). Bullying at School and Labour Market Outcomes. *International Journal of Manpower,* No. 35, Vol. 8, pp. 1185-1211.

Drydakis, N. (2015). The Effect of Sexual Activity on Wages. *International Journal of Manpower,* No. 36, Vol. 2, pp. 192-215.

Drydakis, N. (2017). Brain Types and Wages. *Manchester School*, Vol. 85, No. 2, pp. 183-211.

Eagly, A. H., and Steffen, V. J. (1984). Gender Stereotypes Stem from the Distribution of Men and Women into Social Roles. *Journal of Personality and Social Psychology*, Vol. 46, No. 4, pp. 735–754.

Eagly, A. H., Wood,W. and Diekman, A. B. (2000). Social Role Theory of Sex Differences and Similarities: A Current Appraisal, in T. Eckes. and H. M. Trautner, (Eds.),*The Developmental Social Psychology of Gender* (123–174). Mahwah, NJ: Erlbaum.

Eagly, A. H. (2005). Achieving Relational Authenticity in Leadership: Does Gender Matter? *Leadership Quarterly,* Vol. 16, No. 3, pp. 459-469.

Forseth, U. (2005). Gendered Bodies and Boundary Setting in the Airline Industry. In D. Morgan, B. Brandth, and E. Kvande, (Eds.), *Gender, Body, Work.* London: Ashgate.

Franzway, S. Sharp, R. Mills, Julie E. and Gill, J. (2009). Engineering Diversity: The Problem of Gender Equity in Engineering. *Frontiers: A Journal of Women's Studies*, Vol. 30, No. 1, pp. 89-106.

Heckman, J. J. Stixrud, J. and Urzua, S. (2006). The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior. *Journal of Labor Economics*, Vol. 24, No. 3, pp. 411-482.

Heilman, M. E. (2012). Gender Stereotypes and Workplace Bias. *Research in Organizational Behavior*, Vol. 32, pp. 113-135.

Hewlett, A. S. and Luce, C. B. (2005). Off Ramps and On Ramps: Keeping Talented Women on the Road to Success. *Harvard Business Review*, Vol. 83, No. 3, pp. 43-46.

Holt, C. L. and Ellis, J. B. (1998). Assessing the Current Validity of the BEM Sex-Role Inventory. *Sex Roles*, Vol. 39, No. 11-12, pp. 929-941.

Honeyman, K. and Goodman, J. (1991). Women's Work, Gender Conflict, and Labour Markets in Europe, 1500-1900. *Economic History Review*. Vol. 44, No. 4, pp. 608-628.

Koenig, A. M. Eagly, A. H. Mitchell, A. A. and Ristikari, T. (2011). Are Leader Stereotype Masculine? A Meta-Analysis of Three Research Paradigms. *Psychological Bulletin*, Vol. 137, No. 4, pp. 616-642.

Kolb, J.A. (1999). The Effect of Gender Role, Attitude Toward Leadership, and Self-Confidence on Leader Emergence: Implications for Leadership Development. *Human Resource Development Quarterly*, Vol. 10, No. 4, pp. 305-320.

Lefkowitz, E. S. and Zeldow, P. B. (2006). Masculinity and Femininity Predict Optimal Mental Health: A Belated Test of the Androgyny Hypothesis. *Journal of Personality Assessment*, Vol. 87, No. 1, pp. 95-101.

Levin, P. (2001). Gendering the Market: Temporality, Work and Gender on a National Futures Exchange. *Work and Occupations*, Vol. 28, No. 1, pp. 112-130.

Messerschmidt, James. (2004). Varieties of 'Real Men.' In M. S. Kimmel, and A. Aronson, (Eds.), *The Gendered Society Reader* (126-150). New York: Oxford University Press.

Mueller, G. and Plug, S. E. (2006). Estimating the Effect of Personality on Male-Female Earnings. *Industrial and Labor Relations Review*, Vol. 60, No. 1, pp. 3-22.

Nyhus, E. K. and Pons, E. (2005). The Effects of Personality on Earnings. *Journal of Economic Psychology*, Vol. 26, No. 3, pp. 363–384.

Osborne Groves, M. (2005). How Important is Your Personality? Labor Market Returns to Personality for Women in the US and UK. *Journal of Economic Psychology*, Vol. 26, No. 6, pp. 827-841.

Office for National Statistics. (2013). *Women in the Labour Market*. Newport: Office for National Statistics.

O'Neil, O. A. and O'Reilly, C. A. (2010). Careers as Tournaments: The Impact of Sex and Gendered Organizational Culture Preferences on MBA's Income Attainment. *Journal of Organizational Behavior*, Vol. 31, pp. 856-876.

Ozkan, T. and Lajunen, T. (2005). Masculinity, Femininity, and the BEM Sex Role Inventory in Turkey. *Sex Roles*, Vol. 52, No. 1-2, pp. 103-110.

Prentice, D. A. and Carranza, E. (2002). What Women Should Be, Shouldn't Be, Are Allowed to Be, and Don't Have to be: The Contents of Prescriptive Gender Stereotypes. *Psychology of Women Quarterly*, Vol. 26, No. 4, pp. 269-281.

Rudman, L. A. and Phelan, J. E. (2008). Backlash Effects for Disconfirming Gender Stereotypes in Organizations. In A. P. Brief, and B. M. Staw, (Eds.*), Research in Organizational Behaviour* (4: 61-79). New York, Elsevier.

Schein, V. E. (2001). A Global Look at Psychological Barriers to Women's Progress in Management. *Journal of Social Issues*, Vol. 57, No. 4, pp. 675-688.

Vongas, J. G. and Al Hajj, R. (2015). The Evolution of Empathy and Women's Precarious Leadership Appointments. *Frontiers in Psychology*, Vol. 6, pp. 1751-1765.

Waddel, G. R. (2006). Labor Market Consequences of Poor Attitude and Low Self-Esteem in Youth. *Economic Inquire,* Vol. 44, No. 1, pp. 69-97.

Wajcman, J. (2000). Feminism Facing Industrial relations in Britain. *British Journal of Industrial Relations*. Vol. 38, No.2, pp. 183-201.

Wayne, J. H. and Cordeiro, B. L. (2003). Who is Good Organizational Citizen? Social Perception of Male and Female Employees Who Use Family Leave. *Sex Roles*, Vol. 49, No. 5-6 ,pp. 233-246.

Weichselbaumer, D. (2004). Is It Sex or Personality? The Impact of Sex Stereotypes on Discrimination in Applicant Selection. *Easter Economic Journal*, Vol. 30, No. 2, pp. 159-186.

Weichselbaumer, D. and Winter-Ebmer, R. (2005). A Metaanalysis of the International Gender Wage Gap. *Journal of Economic Surveys,* Vol. 19, No. 3, pp. 483–511.

Williams, J. E. and Best, D. L. (1990). *Measuring Sex Stereotypes: A Multinational Study*. CA: Sage Publications.

Williams, M. J. Levy Paluck, E. and Spender-Rodgers J. (2010). The Masculinity of Money: Automatic Stereotypes Predict Gender Differences in Estimated Wages. *Psychology of Women Quarterly*, Vol. 34, No. 1, pp. 7-10.

WorldPay Zinc, (2013). Attitudes in the Workplace: A Study of Sexism and Discrimination in Britain. London: WorldPay Zinc and Vision Critical.

Wong, M. L. (2005). Subtextual Gendering Processes: A Study of Japanese Retail Firms in Hong Kong. *Human Relations*, Vol. 58, No. 2, pp. 249-276.

Xiumei, Y. Meifang, W. and Qing, Z. (2012). Effects of Gender Stereotypes on Spontaneous Trait Inferences and the Moderating Role of Gender Schematicity: Evidence from Chinese Undergraduates. *Social Cognition*, Vol. 30, No. 2, pp. 220–231.

Table 1. Access to occupations

Outcomes Jobs	Jobs	Neither Invited	At least one invited	Both invited	Only women with masculine personality traits were invited	Only women with feminine personality traits were invited	Net difference		χ^2 test
			(1)		(2)	(3)	(2)-(3)	[(2)-(3)]/(1) %	
Business jobs	138	73	65	39	21	5	16	24.6	8.2*
Education	117	82	35	17	13	5	8	22.8	2.8***
Social services	96	57	39	20	15	4	11	28.2	5.1**
Total	351	212	139	76	49	14	35	25.1	16.1*

*Notes: The null hypothesis is "Both applicants are treated unfavourably equally often," that is, (2) = (3). *Statistically significant at the 1% level. **Statistically significant at the 5% level. ***Statistically significant at the 10% level.*

Table 2. Entry level annual wages (£)

Occupations	Women with masculine personality traits	Women with feminine personality traits	t- test
Business jobs	29,172.4 (2,341.1) n=29	27,750.1 (2,408.5) n=24	1,943**
Education	26,263.1 (2,445.9) n=19	25,133.3 (2,166.8) n=15	1,405***
Social services	25,523.8 (2,441.7) n=21	24,600.1 (1.843.9) n=15	1,233
Total	27,260.8 (3,042.1) n=69	26,148.1 (2.645.1) n=54	2.131**

*Note: Standard deviations are in parentheses. **Statistically significant at the 5% level. ***Statistically significant at the 10% level.*

Table 3. Estimates

	Model I Probit estimates (marginal effects); Access to vacancies	Model II OLS wage (ln) estimates
Women with masculine personality traits[a]	0.101 (0.034)*	0.043 (0.015)*
Education[b]	-0.150 (0.037)*	-0.102 (0.018)*
Social services[b]	-0.065 (0.040)	-0.127 (0.018)*
Log likelihood	-421.061	-
LR chi^2	22.86	-
Prob> chi^2	0.000	-
Pseudo R^2	0.026	-
Observations	702	-
Root MSE	-	0.086
F	-	20.51
Prob>F	-	0.000
Adj R^2	-	0.324
Observations	-	123

*Notes: [a]The reference category is women with feminine personality traits. [b]The reference category is business jobs. SEs are in parenthesis. *Statistically significant at the 1% level.*